

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

January 28, 2015

David McMullin C.S. Mining LLC P.O. Box 608 Milford, Utah 84751

Subject: Completeness Review of Notice of Intention to Commence Large Mining Operations, C.S.

Mining LLC, Hidden Treasure Mine, M/001/0067, Beaver County, Utah

Dear Mr. McMullin

The Division of Oil, Gas and Mining has performed a completeness review of the referenced amended replacement Notice of Intention to Commence Large Mining Operations which was received on June 1, 2015, in response to the Division's enforcement action. As a result of the submission of other amendment requests considered by C.S. Mining to be a higher priority (such as multiple Copper Ranch pit amendments to the large mine Notice and exploration amendments), the Division postponed the review until this time.

As you are aware, the amended Notice is incomplete. The replacement Notice consists of text only; no figures have been provided, and no direct comments related to figures were made. A number of tables are incomplete. Because of the lack of a complete Notice, these review comments cannot be considered comprehensive, and additional review comments will likely be generated as missing information is provided. Of particular note, the Division is awaiting a response to separate Division comments regarding the variance request, and until the required information is provided, the Notice will need to reflect the existing Notice approval.

The Division understands a more complete Notice is about to be submitted. The attached comments, a number of which are more detailed, will need to be addressed before tentative approval of the re-written Notice may be granted, but not necessarily before the next submittal.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion.



Initial Review Page 2 of 6 M/001/0067 January 29, 2016

Please contact Peter Brinton at 801-538-5258 or me at 801-538-5261 if you have questions regarding this review. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB: pnb: eb Attachment: Review

cc: Ed Ginouves, BLM-Cedar City (UTU-82071); eginouve@blm.gov
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Initial Review Page 3 of 6 M/001/0067 January 29, 2016

COMPLETENESS REVIEW OF RE-WRITTEN NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

C.S. Mining LLC Hidden Treasure Mine M/001/0067 January 27, 2016

General Comments:

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments. (No specific response required.)	pbb	
2	General	The Division may have additional comments based on the responses to this review. Please attempt to provide a complete, technically adequate submittal. (No specific response required.)	pbb	
3	General	Amend the Notice to reflect the current approvals for waste rock dump slope regrading. Not enough information has been provided for the Division to approve the proposed variance.	pnb	
4	General	Significant information is missing from tables and other sections of the NOI (e.g. 106.3). Until the Division receives additional information, review comments cannot be considered complete.	pnb	

R647-4-104 - Operator Information and Surface and Mineral Ownership

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
5	p. 104-2	Correct the registration number to be consistent with the Division f Corporations.	pnb	
6	p. 104-3, Omission	Add the telephone number.	pnb	
7	p. 104-5, Omission	Identify the SITLA lease number.	pnb	
8		Once the exploration permits have been consolidated into one permit, the table will need to be changed. Also, indicate the Groundwater Discharge Permit for the new acid leach and SX/EW facilities.	pnb	

R647-4-105 - Maps, Drawings & Photographs

General Map Comments

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
9	p. 105-1, para 2	Indicate that the pre-act boundaries are also shown on maps.	pnb	

Initial Review Page 4 of 6 M/001/0067 January 29, 2016

R647-4-106 - Operation Plan

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
10	Various locations	Modify the discussion of waste rock dumps in this section to reflect the existing approval, which requires regrading of, soil placement on, and seeding of waste rock dumps. Additional information is required by the Division before a variance for dump slope regrading may be approved.	pnb	
11		There is at least one paragraph that has been removed that discusses post-2012 amendments. For consistency, please include this deleted paragraph and update it to be consistent with more recent permitting activities (e.g. Copper Ranch).	pnb	

106.2 - Type of operations - mining method, onsite processing, deleterious or acid-forming materials

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
12	106.1, para 2	The statement that acid forming materials will not be produced may need to be changed, since tailings from the acid leach facilities may have residual acidity in their pore water.	pnb	
13	106.2, para 4	Since significant amounts of water will evaporate from the tailings ponds. Please remove or modify the reference to the water system as closed.	pnb	
14	106.2.1, para 1	Identify the minimum width of the catch benches in order to achieve the overall maximum slope of 45 degrees.	pnb	
15	106.2.3, para 1	Indicate that county roads are also used as haul roads. It would be appropriate to indicate here what is done to prevent impacts to public safety.	pnb	
16	106.2.6, Omission	Discuss what will be done with the crud and any other by-products of processing that are not salable.	pnb	
17	106.2.7, para 1	Change the language to state that some reagents are considered deleterious.	pnb	
18	106.2.7, para 1	Since the new processing facilities are not lined with concrete as originally planned, provide copies of the pertinent DWQ approval letters and associated permit documents.	pnb	
19	106.2.7, para 2	Identify the fate of each (or groups) of the reagents. Will they be recycled or removed as waste? How much of the reagents will remain in the tailings streams?	pnb	
20	106.2.9, para 1	Reference and briefly summarize the approval from Dam Safety for the construction and operation of the ITDF impoundment.	pnb	
21	106.2.9, para 2	Explain the selective tailings deposition.	pnb	
22	106.2.9, Omission	Indicate whether other materials will be disposed of in the IDTF, and if so, provide the relative quantities.	pnb	
23	106.2.9, Omission	State whether a barge will be operated on the tailings pond, and if so, its purpose.	pnb	
24	106.2.9, Omission	Reference the locations of summarized ITDF embankment design information (e.g. 106.9).	pnb	
25	106.2.9, Omission	The ITDF capacity is now different than stated in the existing Notice and in Section 106.9.2. Correct or explain as needed.	pnb	
26	106.2.9, para 6	Discuss the inputs and outputs of the ITDF water balance, and, considering differences in reported capacity, the informally-reported need to store more water in the impoundment, and the lack of constructed stormwater diversion, ensure that conditions will not result in an overall gaining facility that could exceed ITDF capacity.	pnb	

Initial Review Page 5 of 6 M/001/0067 January 29, 2016

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
27	106.2.9, para 6	Identify the ITDF's minimum allowable freeboard, as required by any other permits, and commit to not store water or fluid in the ITDF embankments in excess of the volume associated with that minimum freeboard.	pnb	
28	106.2.9, para 7	As of the last inspection, no diversion structures had been constructed. The current capacity of the ITDF is relatively large, but if the ITDF designs have changed, provide the new designs in the appropriate appendix, and correct this text accordingly.	pnb	
29	106.2.9, Omission	Indicate how the spreading and verification of a two-inch fines layer is to be accomplished.	pnb	

106.4 - Nature of materials mined or processed (including waste materials), and estimated annual tonnages

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
30	106.4, para 4	Discuss the nature of the tailings, considering that they will be acid leached. Some residual acidity is likely. Include plans for sampling of acid-leached tailings as the new facilities are tailored to meet copper recovery needs.	pnb	
31	106.4, para 6	Identify thicknesses and characteristics of materials that will be considered adequate for encapsulation of any acid-forming or otherwise deleterious material. For example, material measuring 10 feet thick and with a neutralization potential ratio of at least 3.0 is commonly used or required for encapsulation of known or likely acid forming materials. The term "contaminated" should be replaced with "deleterious".	pnb	
32	106.4, Tables 6 & 7	Include the average sulfur concentrations, and also the carbon concentrations attributed to the reported neutralization potentials for the described materials.	pnb	
33	106.4, Tables 6 & 7	Identify the number of samples for each of the specific material types and locations shown in Tables 6 and 7. A map with the sample locations should also be provided. More detailed tables (like those used in past versions of the approved Notice) should be included in the appendices.	pnb	
34	106.4, Omission	Basic static leach testing (such as MWMP or SPLP testing) is a standard requirement of most mines to determine possible metals leaching concerns. Discuss the materials mined in these terms, and identify plans for basic static leach testing of material to be mined going forward.	pnb	
35	106.4.1	As discussed in the past, the section about nitrates should be briefly summarized.	pnb	

106.9 - Location & size of ore and waste piles, tailings, ponds

Comment #	Sheet/Page/ Map/Table #		Initials	Review Action
36		Discuss the constructed slope design of the ITDF embankments (slope dimensions of both starter dams and raises, heights of raises, etc).	pnb	

R647-4-110 - Reclamation Plan

General Reclamation Comments

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Initial Review Page 6 of 6 M/001/0067 January 29, 2016

Comment #	Sheet/Page/ Map/Table #		Initials	Review Action
37	locations	Modify the discussion of waste rock dumps in this section to reflect the existing approval, which requires regrading of, soil placement on, and seeding of waste rock dumps. Additional information is required before a variance for dump slope regrading may be approved.	pnb	

R647-4-112 - Variance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
38	Note	Additional information will be required before a variance can be approved, as requested in the Division's letter dated November 24, 2015.	pnb	

R647-4-113 - Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
39	Note	The Division will need to review the reclamation cost estimate once the Notice is more complete. (No specific response needed.)	pnb	